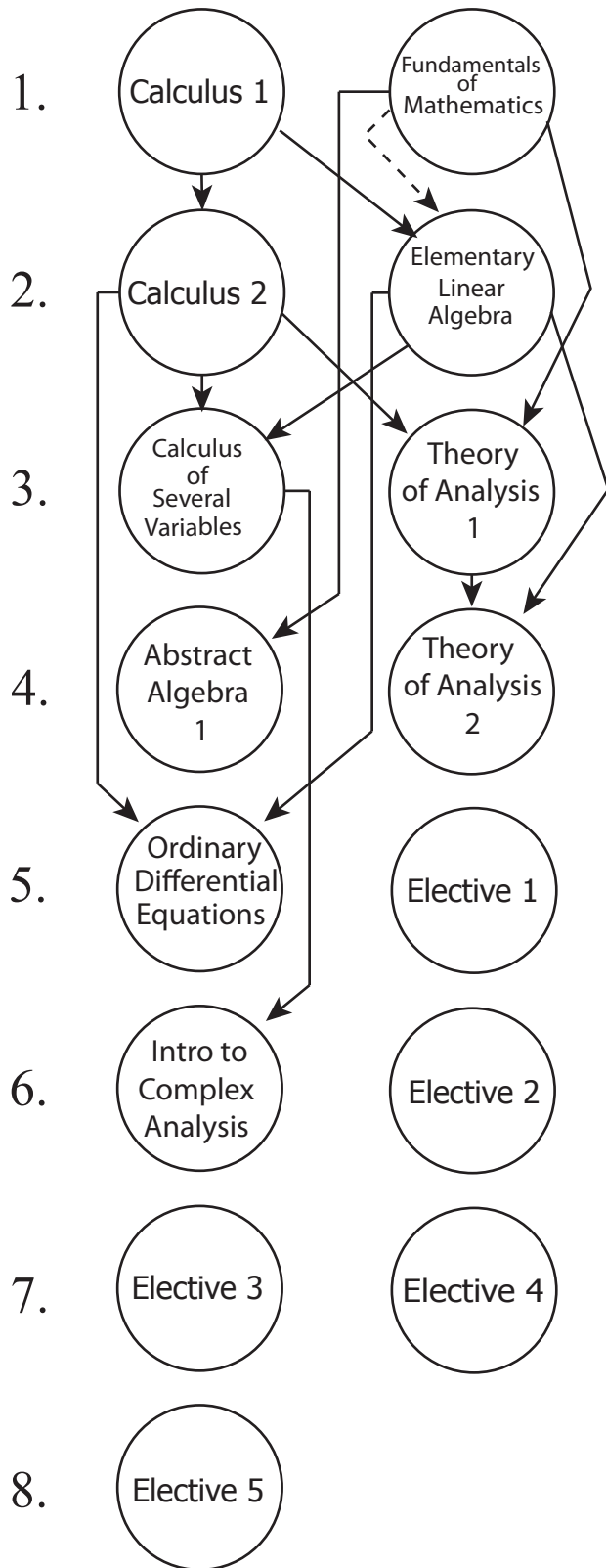


Semester

Mathematics Undergraduate Map to Graduation

A basic path in undergraduate mathematics training



—————→ Prerequisite
 - - - - -→ Recommended

Students in the math major must take a total of five mathematics electives. Three of these must be approved by a faculty advisor - the other two can be chosen from the following list:

- History and Philosophy of Mathematics
- Probability Theory
- Introduction to Partial Differential Equations
- Combinatorics
- Graph Theory
- Survey of Geometry
- Abstract Algebra
- Number Theory
- Introduction to Numerical Methods
- Numerical Methods
- Mathematical Finance
- Introduction to Topology
- Topics in Geometry
- Differential Geometry
- Mathematical Models
- Readings in Mathematics
- Numerical Methods for Linear Algebra
- Numerical Methods for Partial Differential Equations
- Advanced Topics in Applied Mathematics
- Methods of Applied Mathematics 1
- Methods of Applied Mathematics 2
- Complex Analysis
- Introduction to Dynamical Systems 1
- Real Analysis
- Real Analysis
- Advanced Probability 1
- Advanced Probability 2
- Partial Differential Equations 1
- Partial Differential Equations 2
- Foundations of Topology 1
- Foundations of Topology 2
- Introduction to Algebraic Geometry
- Introduction to Algebraic Geometry
- Matrix Analysis
- Introduction to Algebraic Number Theory
- Introduction to Analytic Number Theory

Possible Sequence of Electives:

- Graduate School Preparation: Abstract Algebra, Complex Analysis, Real Analysis, Intro to Topology
- Cryptography: Abstract Algebra, Number Theory, Mathematical Cryptography, Combinatorics, Intro to Algebraic Number Theory
- Applied Math: Intro to Partial Differential Equations, Intro to Numerical Methods, Numerical Methods, Intro to Dynamical Systems, Advanced Probability
- Probability: Combinatorics, Intro to Numerical Methods, Advanced Probability
- Topology: Intro to Topology, Differential Geometry, Foundations of Topology
- Number Theory: Abstract Algebra, Number Theory, Intro to Algebraic Number Theory, Intro to Analytic Number Theory, Intro to Algebraic Geometry